

November 2020

**Charles R. Randklev**

Research Scientist

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**EDUCATION**

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- 2006-2011      **Ph.D.**, Biology, University of North Texas, Denton, Texas  
Dissertation: *The Ecology and Paleobiogeography of Freshwater Mussels (Family Unionidae) within selected Texas Rivers*
- 2002-2005      **B.S.**, Biology, The University of Texas at Arlington, Arlington, Texas

**PROFESSIONAL EXPERIENCE**

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- 2012-present      **Research Scientist**, Natural Resources Institute, Texas A&M University, College Station, Texas
- 2018-present      **Adjunct Faculty**, Department of Wildlife & Fisheries, Texas A&M University, College Station, Texas.
- 2011-2012      **Research Associate**, Natural Resources Institute, Texas A&M University, College Station, Texas

## **RESEARCH AREAS**

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General: Population and Community Ecology; Aquatic Ecology; Conservation Biology; Restoration Ecology; Landscape Modeling

Specific: Population Monitoring and Status Assessments; Regulation of Populations and Community Structure; Environmental Flow Analyses; Physiological Testing to Determine Water Quality Tolerances; Life History Theory; Biodiversity and Conservation

## **PUBLICATIONS, PEER REVIEWED (\*indicates mentored student or staff)**

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44. Keogh, S.M., N.A. Johnson, J.D. Williams, **C.R. Randklev**, and A.M. Simons. Gulf Coast vicariance and Mississippian range expansion shapes phylogeny and demographic history of North American freshwater mussel species complex (Bivalvia: Unionidae). *Journal of Biogeography*, forthcoming.

43. Tiemann, J.S., K. Inoue, J.A. Rodriguez-Pineda, M. Hart, K.S. Cummings, and **C.R. Randklev**. Status of freshwater mussels (Unionidae) of the Rio Conchos Basin, Chihuahua, Mexico. *Southwestern Association of Naturalists*, forthcoming.

42. Hart, M.H.\* , M. Fisher, and **C.R. Randklev**. A cautionary tale about conserving mussels using translocation: a case study from two river basins in central Texas. *Aquatic Conservation: Marine and Freshwater Ecosystems*, forthcoming.

41. Goldsmith, A.M.\* , F. Jaber, H. Ahmari, and **C.R. Randklev**. 2020. Clearing up cloudy waters: a review of sedimentation impacts to unionid freshwater mussels. *Environmental Reviews*, DOI: 10.1139/er-2020-0080.

40. Smith, C.\* , N. Johnson, K. Havlik, R. Doyle, and **C.R. Randklev**. 2020. Resolving species boundaries in the critically imperiled freshwater mussel species, *Fusconaia mitchelli* (Bivalvia: Unionidae). *Journal of Zoological Systematics and Evolutionary Research*, DOI: 10.1111/jzs.12412.

39. **Randklev, C.R.**, S. Wolverson, N. Johnson, T. Popejoy, C.H. Smith, T.P. DuBose, C.R. Robertson, and J. Conley. 2020. The utility of zooarchaeological data to guide listing efforts for an imperiled mussel species (Bivalvia: Unionidae: *Pleurobema riddellii*). *Conservation Science and Practice* 2: e253.

38. Khan, J.\*, J. Dudding, M. Hart, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2020. Upper thermal limits of freshwater mussels (Bivalvia: Unionidae) from the Guadalupe River, Texas: linking flow and thermal tolerances of freshwater mussel species from the southwestern United States. *Freshwater Biology* 65: 2037-2052.
37. Khan, J.\*, J. Dudding, M. Hart, E. Tsakiris, and **C.R. Randklev**. 2020. Linking life history strategies and historical baseline information shows effects of altered flow regimes and impoundments on freshwater mussel assemblages. *Freshwater Biology* 65: 1950-1961.
36. Inoue, K.\*, K. Cummings, J. Tiemann, T. Miller, and **C.R. Randklev**. 2020. A new species of *Popenaias*, Frierson, 1927, from the Gulf Coastal drainages of central Mexico (Bivalvia: Unionidae). *Zootaxa* 4816: 457-490.
35. Dudding, J.\*, M. Hart, J. Khan, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2020. Reproductive life history of two imperiled and one widely distributed freshwater mussel species from the southwestern United States: *Cyclonaias necki* (Guadalupe Orb), *Fusconaia mitchelli* (False Spike), and *Cyclonaias pustulosa* (Pimpleback). *Freshwater Science* 39: 156-168.
34. Inoue, K.\*, J.L. Harris, C.R. Robertson, N.A. Johnson, and **C.R. Randklev**. 2020. A comprehensive approach uncovers hidden diversity in freshwater mussels (Bivalvia: Unionidae) with the description of a novel species. *Cladistics* 36: 88-113.
33. **Randklev, C.R.**, M.A. Hart, J. Khan, E.T. Tsakiris, and C.R. Robertson. 2019. Hydraulic requirements of freshwater mussels (Unionidae): two case studies from the Brazos and Trinity rivers of the Western Gulf Coastal Plain region of south-central USA. *Ecosphere*, DOI: 10.1002/ecs2.2975.
32. Smith, C.H.\*, N.A. Johnson, K. Inoue, R.A. Doyle, and **C.R. Randklev**. 2019. Integrative taxonomy reveals cryptic speciation in freshwater mussels (Bivalvia: Unionidae: *Potamilus*). *Systematics and Biodiversity*, DOI: 10.1080/14772000.2019.1607615.
31. Khan, J.\*, M. Hart, J. Dudding, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2019. Evaluating the upper thermal limits of glochidia for select freshwater mussels species (Bivalvia: Unionidae) in central and east Texas and the implications for their conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems* 8: 1202-1215.

30. Dudding, J.\* , M. Hart, J. Khan, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2019. Host fish association of two highly imperiled mussel species from the southwestern United States: *Cyclonaias necki* (Guadalupe Orb) and *Fusconaia mitchelli* (False Spike). *Freshwater Mollusk Biology and Conservation* 22: 12-19.
29. Hart, M.A.\* , T.D. Miller, and **C.R. Randklev**. 2019. Salinity tolerance of a rare and endangered unionid mussel, *Popenaias popeii* (Texas Hornshell) and its implications for conservation and water management. *Ecotoxicology and Environmental Safety* 170: 1-8.
28. **Randklev, C.R.**, E.T. Tsakiris, M.S. Johnson, T. Popejoy, M.A. Hart, J. Khan, D. Geeslin, and C.R. Robertson. 2018. The effect of dewatering on freshwater mussel (Unionidae) community structure and the implications for conservation and water policy: A case study from a spring-fed stream in the Southwestern United States. *Global Ecology and Conservation*, DOI: 10.1016/j.gecco.2018.e00456.
27. Johnson, N.A., C.H. Smith, J.M. Pfeiffer, **C.R. Randklev**, J.D. Williams, and J.D. Austin. 2018. Integrative taxonomy resolves taxonomic uncertainty for freshwater mussels being considered for protection under the U.S. Endangered Species Act. *Scientific Reports*, DOI:10.1038/s41598-018-33806-z.
26. Popejoy, T.\* , **C.R. Randklev**, T. Neeson, and C. Vaughn. 2018. Prioritizing sites for conservation based on similarity to historical baselines and feasibility of protection. *Conservation Biology* 32: 1118-1127.
25. Pieri, A.M.\* , K. Inoue, N.A. Johnson, C. Smith, J.L. Harris, C.R. Robertson, and C.R. **Randklev**. 2018. Molecular and morphometric analyses reveal cryptic diversity within freshwater mussels (Bivalvia: Unionidae) of the western Gulf coastal drainages of the United States. *Biological Journal of the Linnean Society* 124: 261-277.
24. Hess, M.C.\* , K. Inoue, E. Tsakiris, M. Hart, J. Morton, J. Dudding, C. Robertson, and **C.R. Randklev**. 2018. Misidentification rates of sex for *Lampsilis teres*, yellow sandshell, and its implications for mussel conservation. *PLOS ONE*, <https://doi.org/10.1371/journal.pone.0197107>.
23. **Randklev, C.R.**, T. Miller, M. Hart, J. Morton, N.A. Johnson, K. Skow, K. Inoue, E.T. Tsakiris, S. Oetker, R. Smith, C. Robertson, and R. Lopez. 2018. A semi-arid river in distress: contributing factors and recovery solutions for three imperiled freshwater mussels (Family Unionidae) endemic to the Rio Grande Basin in North America. *STOTEN* 631-632: 733-744.

22. Inoue, K.\*, D.M. Hayes, J.L. Harris, N.A. Johnson, C.L. Morrison, M.S. Eackles, T.M. King, J.W. Jones, E.M. Hallerman, A.D. Christian, and **C.R. Randklev**. 2018. The Pleurobemini (Bivalvia: Unionida) revisited: molecular species delineation using a mitochondrial DNA gene reveals multiple conspecifics and undescribed species. *Invertebrate Systematics* 32: 689-702.
21. Popejoy, T.\*, S. Wolverton, L. Nagaoka, and **C.R. Randklev**. 2018. An interpretive framework for assessing freshwater mussel taxonomic abundances in zooarchaeological faunas. *Quaternary International* 427: 36-46.
20. Tsakiris, E.T.\*, **C.R. Randklev**, A. Blair, M. Fisher, and K. Conway. 2017. Effects of translocation on survival and growth of freshwater mussels within a West Gulf Coastal Plain river system. *Aquatic Conservation: Marine and Freshwater Ecosystems* 27: 1240-1250.
19. Wolverton, S., and **C.R. Randklev**. 2016. Archaeological data indicate a broader late Holocene distribution of the sandbank pocketbook (Unionidae: *Lampsilis satura*, Lea 1852) in Texas. *American Malacological Bulletin* 34: 133-137.
18. Tsakiris, E.T.\*, **C.R. Randklev**, K.W. Conway. 2016. Effectiveness of a nonlethal method to quantify gamete production in freshwater mussels. *Freshwater Science* 35: 958-973.
17. Tsakiris, E.T.\*, and **C.R. Randklev**. 2016. Structural changes in freshwater mussel (Bivalve: Unionidae) assemblages downstream of Lake Somerville, Texas. *American Midland Naturalist* 175: 120-127.
16. Pfeiffer, J.M., N.A. Johnson, **C.R. Randklev**, R.G. Howells, and J.D. Williams. 2016. Generic reclassification and species boundaries in the rediscovered freshwater mussel *Fusconaia mitchelli* (Simpson in Dall, 1896). *Conservation Genetics* 17: 279-292.
15. **Randklev, C.R.**, N. Ford, S. Wolverton, J.H. Kennedy, C.R. Robertson, K. Mayes, and D. Ford. 2016. The Influence of stream discontinuity and life history strategy on mussel community structure: a case study from the Sabine River, Texas. *Hydrobiologia* 770: 173-191.
14. **Randklev, C.R.**, H.H. Wang, J.E. Groce, W.E. Grant, S. Robertson, and R.N. Wilkins. 2015. Land use relationships for a rare freshwater mussels species (Family: Unionidae) endemic to central Texas. *Journal of Fish and Wildlife Management* 6: 327-337.
13. Sowards, B.\*, E.T. Tsakiris, M. Libson, and **C.R. Randklev**. 2013. Recent collection of a false spike (*Quadrula mitchelli*) in the San Saba River, Texas, with comments on habitat use. *Walkerana* 16: 63-67.

12. **Randklev, C.R.**, J. Skorupski, B.J. Lundeen, and E.T. Tsakiris. 2013. New distributional records for four rare freshwater mussel species (Family: Unionidae) in southwestern Louisiana. *The Southwestern Naturalist* 58: 268-273.

11. **Randklev, C.R.**, E.T. Tsakiris, M.S. Johnson, J. Skorupski, L.E. Burlakova, J. Groce, and N. Wilkins. 2013. Is False Spike, *Quadrula mitchelli* (Bivalvia: Unionidae), extinct? First account of a very-recently deceased individual in over thirty years. *The Southwestern Naturalist* 58: 247-259.

10. **Randklev, C.R.**, M.S. Johnson, E.T. Tsakiris, J. Groce, and N. Wilkins. 2013. Status of the freshwater mussel (Family: Unionidae) fauna in the mainstem of the Leon River, Texas. *Aquatic Conservation: Marine and Freshwater Ecosystems* 23: 390-404.

9. Johnson, M.S.\*, P.D. Caccavale, **C.R. Randklev**, and J.R. Gibson. 2012. New and confirmed fish hosts for the threatened freshwater mussel *Lampsilis bracteata* (Gould, 1855), the Texas fatmucket. *The Nautilus* 126: 148-149.

8. **Randklev, C.R.**, and B. Lundeen. 2012. Prehistoric Biogeography and Conservation Status of Threatened Freshwater Mussels (Mollusca: Unionidae) in the Upper Trinity River Drainage, Texas. In *Conservation Biology and Applied Zooarchaeology*, edited by S. Wolverton and R.L. Lyman, pp. 68-91. The University Of Arizona Press, Tucson.

7. Peacock, E., **C.R. Randklev**, S. Wolverton, R.A. Palmer, and S. Zaleski. 2012. Innocence before Guilt: The 'Cultural Filter' and the Applied Potential of Zooarchaeological Data. *Ecological Applications* 22: 1446-1459.

6. **Randklev, C.R.**, M.S. Johnson, E.T. Tsakiris, S. Rogers-Oetker, K.J. Roe, S. McMurray, C. Robertson, J. Groce, and N. Wilkins. 2012. False Spike, *Quadrula mitchelli* (Bivalvia: Unionidae) is not extinct: first account of a live population in over 30 years. *American Malacological Bulletin* 30: 327-328.

5. Wolverton, S., **C.R. Randklev**, and A. Barker. 2011. Ethnobiology as a Bridge between Science and Ethics: An Applied Paleozoological Perspective. Pages 115-132 in *Ethnobiology*. E. Anderson, editor. Wiley-Blackwell.

4. **Randklev, C.R.**, S. Wolverton, B.J. Lundeen, and J.H. Kennedy. 2010. A paleozoological perspective on unionid (Mollusca: Unionidae) zoogeography in the upper Trinity River basin. *Ecological Applications* 20: 2359-2368.

3. **Randklev, C.R.**, B.J. Lundeen, R.G. Howells, and J.H. Kennedy. 2010. Habitat preference and first account of a living population of Texas Fawnsfoot, *Truncilla macrodon* (Bivalvia: Unionidae) [I. Lea, 1859] in the Brazos River. *The Southwestern Naturalist* 55: 297-298.

2. Wolverton, S., **C.R. Randklev**, and J.H. Kennedy. 2010. A conceptual model for freshwater shellfish (family: Unionidae) remain preservation in zooarchaeological assemblages. *Journal of Archaeological Science* 37: 164-173.

1. **Randklev, C.R.**, S. Wolverton, and J.H. Kennedy. 2009. A Biometric Technique for Assessing Prehistoric Freshwater Mussel Population Dynamics (Family: Unionidae) in North Texas. *Journal of Archaeological Science* 36: 205-213.

### **WORKS IN PROGRESS (\*indicates mentored student or staff)**

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Saxon, R., K.J. Roe, C.H. Smith, and **C.R. Randklev**. Reassessment of the presence of the freshwater mussel species *Truncilla macrodon* (Bivalvia: Unionida) in the Trinity River, Texas. *American Malacological Bulletin*, in preparation.

Goldsmith, A.M.\*, J. Khan, C.R. Robertson, R. Lopez, and **C.R. Randklev**. Using upper thermal limits of *Lampsilis bracteata* (Texas Fatmucket) from the North Llano and San Saba rivers, Texas, to inform water management practices in the Edwards Plateau. *Aquatic Conservation: Marine and Freshwater Ecosystems*, in review.

Kiser, A.\*, J. Khan, R. Lopez, and **C.R. Randklev**. The effect of flow and mussel species traits on the occurrence of rare mussels: a case study within select rivers of the West Gulf Coastal Plain. *Freshwater Biology*, in review.

Smith, C.H.\*, N.A. Johnson, C.R. Robertson, R.D. Doyle, and **C.R. Randklev**. Establishing management units to promote recovery of two threatened freshwater mussel species (Bivalvia: Unionida: *Potamilus*). *Ecology and Evolution*, in review.

### **NON-REFEREED ARTICLES (\*indicates mentored student or staff)**

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Howells, R.G., **C.R. Randklev**, and N. Ford. 2017. Accuracy of freshwater mussel identification: results from a study in Texas. *American Conchologist* 45: 9-17.

Boseman, B.\*, B. Christie, M. Hart, J. Morton, and **C. Randklev**. 2015. Hosts confirmed for *Potamilus amphichaenus* and *Potamilus metnecktayi*. *Ellipsaria* 17: 15-16.

**Randklev, C.R.**, E.T. Tsakiris, R.G. Howells, J. Groce, M.S. Johnson, J. Bergmann, C. Robertson, A. Blair, B. Littrell, and N. Johnson. 2013. Distribution of extant populations of *Quadrula mitchelli* (false spike). *Ellipsaria* 15: 18-21.

**Howells, R.G.**, C.R. Randklev, and N.B. Ford. 2012. Taxonomic status of pigtoe unionids in Texas. *Ellipsaria* 14: 11-15.

**Randklev, C.R.**, M.S. Johnson, E.T. Tsakiris, S. Rogers-Oetker, K.J. Roe, S. McMurray, C. Robertson, J. Groce, and N. Wilkins. 2011. First account of a living population of False Spike, *Quadrula mitchelli* (Bivalvia: Unionidae), in the Guadalupe River, Texas. *Ellipsaria* 13: 17-19.

Howells, R.G., **C.R. Randklev**, and M.S. Johnson. 2011. Mantle flap variation in Texas Fatmucket (*Lampsilis bracteata*). *Ellipsaria* 13:14-16.

**Randklev, C.R.**, B.J. Lundeen, and J.H. Kennedy. 2007. A survey of freshwater mussels (Family Unionidae) at Lake Nocona, Montague County, Texas. *Ellipsaria* 8: 8.

#### **GRANTS AND FUNDING RECEIVED (\$4,114,305 in total)**

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- 2020 A survey and assessment of freshwater mussels considered for listing under the Endangered Species Act in select river systems in East Texas and Louisiana. **PI:** U.S. Fish & Wildlife Service. Amount \$20,000.
- 2020 Texas Hornshell, *Popenaias popeii*, in the Black River, New Mexico: field and laboratory studies of sublethal thermal and hypoxia stress. **PI:** Center of Excellence – CEHMM. Amount \$57,644.
- 2020 Assessing the phylogenetic relationships and species boundaries of the genus *Truncilla* (Family: Unionidae) in Texas. **PI:** Texas Parks and Wildlife. Amount \$98,914.
- 2020 Host fish use, reproduction and propagation potential of 2 east Texas threatened mussel species. **PI:** Texas Parks and Wildlife. Amount \$153,848.
- 2020 Examining trematode prevalence at mussel biodiversity hotspots throughout the state. **PI:** Texas Parks and Wildlife. Amount \$76,927.
- 2020 Examining the conservation status of freshwater mussels in Texas. **PI:** Texas Parks and Wildlife. Amount \$123,070.



- 2019 Determining downstream ecological impacts of sediment derived from bridge construction. **PI:** Texas Department of Transportation. Amount \$74,700.
- 2018 Habitat utilization of *Popenaias popeii* (Texas Hornshell) in the Devils River. **PI:** The Nature Conservancy. Amount \$46,000.
- 2018 Freshwater mussel survey for five of the seven lakes within the Trinity Regional Project as of the dewatering actions, North Texas. **PI:** Army Corps of Engineers. Amount \$125,000.
- 2018 Freshwater mussel occupancy surveys and translocation. **PI:** Texas Department of Transportation. Amount \$120,000.
- 2018 Influence of thermal tolerance on population performance of rare and common freshwater mussel species in central and east Texas. **PI:** Texas Parks and Wildlife. Amount \$120,180.
- 2018 Thermal tolerance of *Popenaias popeii* from the Rio Grande, Texas. **PI:** Texas Parks and Wildlife. Amount \$124,303.
- 2018 Assessment and review of mussel-hydrologic relationships for mussels in east Texas. **PI:** U.S. Fish & Wildlife Service. Amount \$50,000.
- 2018 Development of a genetics focused guidance document on captive propagation and case study using a rare central Texas mussel, *Lampsilis bracteata* (Texas Fatmucket). **PI:** U.S. Fish & Wildlife Service. Amount \$125,000.
- 2017 Evaluating the efficacy of mussel relocation in Texas with in-situ field studies and the development of a Texas mussel database. **PI:** Texas Department of Transportation. Amount \$380,000.
- 2017 A survey and assessment of taxonomy, phylogeny and population genetics of critically endangered freshwater mussels in east Texas to assess their conservation status. **PI:** U.S. Fish & Wildlife Service. Amount \$90,000.
- 2017 A survey of the freshwater mussels in select Mexican Gulf Coastal drainages to assess the status of the critically endangered, *Popenaias popeii* (Lea, 1857) (Family Unionidae). **PI:** U.S. Fish & Wildlife Service. Amount \$140,000.
- 2017 Rapid risk assessment: freshwater mussels of the Brazos River Basin. **Co-PI:** Brazos River Authority. Amount \$407,885.

- 2016 Evaluating the conservation status of Texas hornshell and other mussels in the Pecos and Devils Rivers. **PI:** Comptroller of Texas. Amount \$73,000.
- 2015 Host fish use of three rare central Texas mussel species. **PI:** Texas Parks and Wildlife. Amount: \$207,361.
- 2015 Mussel data collection in the middle Trinity River. **PI:** Texas Parks and Wildlife. Amount: \$65,000.
- 2015 Cost effective mitigation strategy for state listed freshwater mussels. **PI:** Texas Department of Transportation. Amount: \$63,866.
- 2014 Endangered Species Research Projects for Freshwater Mussels. **PI:** Taskforce on Economic Growth and Endangered Species. Amount: \$637,628.
- 2014 Assessing the conservation status of native freshwater mussels (Family: Unionidae) in the Trinity River basin. **PI:** Texas Parks and Wildlife. Amount: \$119,198.
- 2013 Freshwater mussel ID workshop & certification. **PI:** Comptroller of Texas. Amount: \$46,132.
- 2013 Assessing the conservation status of rare endemic mussel species (Family: Unionidae) in the lower Guadalupe River, Texas. **PI:** Texas Parks and Wildlife. Amount: \$101,272.
- 2013 Mussel relocation study at Rowlett Creek, upper Trinity River drainage. **PI:** North Texas Municipal Water District. Amount: \$12,310.
- 2012 Freshwater mussel survey of the lower Sabine River. **PI:** Texas Parks and Wildlife. Amount: \$50,600.
- 2012 Freshwater mussel and benthic macroinvertebrate data collection in the lower Brazos River. **PI:** Texas Parks and Wildlife. Amount: \$27,770.
- 2012 Freshwater mussel survey of the lower Brazos River. **PI:** Texas Water Development Board. Amount: \$80,000.

- 2012 Relocation of a freshwater mussel population from Co Rd. 340 San Saba River, Texas. **PI:** Texas Department of Transportation. Amount: \$96,239.
- 2011 Developing predictive models for the occurrence of rare and threatened mussel species in Texas. **PI:** Texas Department of Transportation. Amount: \$399,299.
- 2011 Relocation of a mussel population from the San Saba River, Texas: **PI:** U.S. Fish & Wildlife Service. Amount: \$20,000.
- 2010 Zooarchaeological analysis of mussel remains from selected rock-shelters near Belton Lake. **PI:** AMEC Earth & Environmental, Inc. Amount: \$3,500.
- 2010 Summary of unpublished records for candidate mussel species from four museums in north central Texas. **PI:** Save our Springs Alliance. Amount: \$5,000.

## **INVITED SEMINARS**

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**Randklev, C.R.** 2016. Conservation and research priorities for endangered freshwater mussel species in central and west Texas. Department of Biology, Tarleton State University, Texas.

**Randklev, C.R.** 2016. Conservation of endangered endemic freshwater mussel species in central and west Texas. Department of Geography, University of North Texas, Texas.

**Randklev, C.R.**, and R. Lopez. 2015. Mussel Research and Conservation Priorities. Taskforce on Endangered Species, Austin, Texas.

**Randklev, C.R.** 2012. Freshwater mussel research in the Brazos River basin: Highlights, conservation implications, and future directions. Texas Master Naturalists – Brazos Valley Chapter, Blinn College, Texas.

**Randklev, C.R.** 2011. The dam truth about mussels: a case study of the effects of impoundment on unionid mussels in the lower Sabine River basin. Department of Biological Sciences, University of Texas at Tyler, Texas.

## **WORKSHOPS PRESENTED**

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**Randklev, C.R.**, C.R. Robertson, and G. Pandolfi. Co-Instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mollusk Society. San Marcos, Texas. August 2018.

**Randklev, C.R.** and C.R. Robertson. Co-Instructor for a freshwater mussel workshop identification and conservation. Sponsored by the Texas Chapter of the American Fisheries Society. College Station, Texas. January 2018.

**Randklev, C.R.**, C.R. Robertson, and N. Ford. Co-Instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mollusk Society. Beaumont, Texas. August 2017.

**Randklev, C.R.** Instructor for a freshwater mussel identification workshop. Sponsored by the Natural Resources Conservation Service. College Station, Texas. October 2015.

**Randklev, C.R.**, C.R. Robertson, N. Ford, T.M. Miller, and M. May. Co-instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mollusk Society. Seagoville, Texas. August 2015.

**Randklev, C.R.** Instructor for an introductory class on unionid mussels. Sponsored by the Texas Chapter of the Wildlife Society. Junction, Texas. July 2015.

**Randklev, C.R.**, N. Ford, R.G. Howells, and M. May. Co-instructor for a freshwater mussel identification workshop. Sponsored by the Interagency Task Force on Economic Growth and Endangered Species. Junction, Texas. August 2013.

## **PRESENTATIONS AND PROFESSIONAL MEETINGS**

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Contributing factors and recovery solutions for three imperiled freshwater mussels (Family Unionidae) endemic to the Rio Grande basin in North America. *Presented at the 51st Annual Desert Fishes Council Meeting, November 2019.*

Hydraulic requirements of freshwater mussels (Unionidae) and a conceptual framework for predicting how they respond to high flows. *Presented at the 11<sup>th</sup> Biennial FMCS Meeting, April 2019.*

A semi-arid river in distress: contributing factors and recovery solutions for three imperiled freshwater mussels (Family Unionidae) endemic to the Rio Grande basin in North America. *Presented at the 2018 Annual Meeting of the Texas Chapter American Fisheries Society, January 2018.*

Assessing the conservation status of freshwater mussels in the Rio Grande, Texas. *Presented at the 10<sup>th</sup> Biennial FMCS Meeting, April 2017.*

Freshwater mussel research in central and west Texas: highlights, conservation implications and future directions. *Presented at the 53<sup>rd</sup> Annual Meeting of the Texas Chapter of The Wildlife Society, February 2017.*

The effects of large dams on downstream mussel populations. Presented at the 4<sup>th</sup> Biennial Texas Mollusk Symposium, August 2016.

Distribution, abundance, and habitat use by freshwater mussels in the lower Sabine River, Texas. *Poster presented at the 9<sup>th</sup> Biennial FMCS Symposium and the 71<sup>st</sup> Annual UMRCC Meeting, April 2015.*

Mussel micro- and mesohabitat associations for the middle Brazos River basin. *Presented at the 3<sup>rd</sup> Biennial Texas Mollusk Symposium, August 2014.*

The influence of land use and spatial scale on the distribution of an imperiled freshwater mussel (Family: Unionidae), *Quadrula houstonensis*, Smooth Pimpleback, in the Leon River, Texas. *Presented at the 2<sup>nd</sup> Biennial Texas Mollusk Symposium, March 2013.*

Freshwater mussel research in central Texas: highlights, conservation implications and future directions. *Presented at the 1<sup>st</sup> Biennial Texas Mussel Symposium, March 2012.*

Freshwater mussels (Family Unionidae) in the lower Sabin River basin: a case study of the effects of impoundments on downstream mussel communities. *Poster presented at the 58<sup>th</sup> Annual Meeting of the Southwestern Association of Naturalists, April 2011.*

Prehistoric biogeography and conservation status of threatened freshwater mussels (Mollusca: Unionidae) in the upper Trinity River drainage. *Presented at the Society of Ethnobiology 33<sup>rd</sup> Annual Conference, May 2010.*

A Taphonomic Perspective on the Late Holocene Biogeography of Freshwater Mussels in North Texas. *Poster presented at the 94<sup>th</sup> Annual Meeting of the Ecological Society of America, August 2009.*

A Taphonomic model of interspecific differential preservation of freshwater mussel (Family Unionidae) fauna. *Poster presented at the 74<sup>rd</sup> Annual Meeting of the Society for American Archaeology, March 2009.*

Spatial Turnover and Extirpations: Paleozoological Implications of Archaeological Unionid Remains from the Western Upper Trinity River, North Texas. *Poster presented at the 56<sup>th</sup> Annual Meeting of the North American Benthological Society, May 2008.*

Ecological Turnover and Extirpations: Paleozoological Implications of Archaeological Unionid Remains from the Western Upper Trinity River, North Texas. *Presented at the 55<sup>th</sup> Annual Meeting of the Southwestern Association of Naturalists, April 2008.*

A Biometric Technique for Assessing Prehistoric Freshwater Mussel Population Dynamics (Family: Unionidae) in North Texas. *Poster presented at the 73rd Annual Meeting of the Society for American Archaeology, March 2008.*

Conservation Implications of Prehistoric Unionids Found in the Upper Trinity River drainage. *Poster presented at the 54th Annual Meeting of the Southwestern Association of Naturalists, April 2007.*

Prehistoric Biogeography: Conservation Implications of Two Unionids in the Western Upper Trinity River Drainage. *Poster presented at the Society of Ethnobiology 30<sup>th</sup> Annual Conference, March 2007.*

## **GRADUATE COMMITTEES**

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Alex Kiser, Texas A&M University (PhD: In progress)

**Dissertation:** *Evaluating the impact of flow and land use changes on mussel distributions throughout Texas*

Donnovan Patterson, Texas A&M University (PhD: In progress)

**Dissertation:** *Life-history and propagation potential of two rare mussel species in Texas*

Amanda Goldsmith, Texas A&M University (MS: In progress)

**Thesis:** *Thermal tolerance and water management implications of two rare central Texas mussel species*

Mike DeMoulied, Texas A&M University (MS: In progress)

**Thesis:** TBD.

Jack Dudding, Texas A&M University (MS: 2019)

**Thesis:** *Host fish use and reproductive life history of three rare central Texas mussel species*

Jennifer Morton (Khan), Texas A&M University (MS: 2018)

**Thesis:** *Thermal tolerances of select threatened mussel species from central Texas*

Eric Tsakiris, Texas A&M University (PhD: 2016)

**Dissertation:** *Reproductive ecology in conservation management of freshwater mussels (Bivalvia: Unionidae): relocation, non-invasive techniques, and environmental cues*

Traci Popejoy, University of North Texas (MS: 2015)

**Thesis:** *Zooarchaeology and biogeography of freshwater mussels in the Leon River during the late Holocene*

### **INVITED PANELS AND BOARDS**

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2019-present      Texas A&M University – Commerce, Biological & Environmental Sciences Department (BESC) Advisory Board

2018-present      Texas Parks & Wildlife Freshwater Fisheries Advisory Committee, Austin TX.

### **PROFESSIONAL SERVICES**

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2017-present      Member/reviewer of USFWS recovery plan development for *Popenaias popeii*, Texas Hornshell.

2017-present      Texas AgriLife Animal Care and Use Committee

2017-2019          Chair of Planning Committee for the 11<sup>th</sup> Biennial Symposium of the Freshwater Mollusk Conservation Society, April 14<sup>th</sup> - April 18<sup>th</sup>, San Antonio, Texas

### **SERVICE AS REVIEWER (MULTIPLE TIMES FOR MANY JOURNALS)**

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*American Fisheries Society*  
*American Malacological Bulletin*  
*Biosphere*  
*Canadian Journal of Zoology*  
*Ecological Engineering*  
*Environmental Management*  
*Environmental Modeling*  
*Freshwater Biology*  
*Freshwater Mollusk Biology and Conservation*

*Freshwater Science*  
*Hydrobiologia*  
*Journal of Archaeological Science*  
*Journal of Fish and Wildlife Management*  
*Nautilus*  
*STOTEN*  
*The Southeastern Naturalist*  
*Texas Journal of Science*

## **PROFESSIONAL AFFILIATIONS**

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Freshwater Mollusk Conservation Society  
Texas Chapter American Fisheries Society  
Society for Freshwater Science  
American Fisheries Society